MONTANA STATE DEPARTMENT OF FISH AND GAME FEDERAL AID IN FISH RESTORATION SECTION

Helena, Montana

Job Completion Report Development Project

State of Montana

Name <u>Central Montana Fishery Study</u>

Project No. F-24-D-24

Title Statewide Lake and Stream Rehabilitation
Lower Kolar's Reservoir

Period Covered: September 1, 1959 to April 30, 1960.

Abstract:

On October 14, 1959 Lower Kolar's Reservoir was treated with thirty gallons of Pro-Noxfish to eradicate the existing fish population. Due to the low water temperature it was necessary to make an additional application of Fish-Tox on two following dates to insure a complete kill. A gill net was left in the reservoir from December 11 to 17, during which time no fish were caught. Efforts will be made to establish a fishable population by planting rainbow trout fingerlings.

Objectives:

To remove or decimate as completely as possible the existing fish population in Lower Kolar's Reservoir in Judith Basin County, Montana. Fingerling rainbow trout will be planted in the spring of 1960 in an effort to establish a fishable population of trout.

Techniques Used:

On October 14, 1959 Lower Kolar's Reservoir was treated with thirty gallons of Pro-Noxfish, a rotenone emulsive.

The emulsion was distributed from a thirty gallon drum by means of a hand pump and a hose. The emulsion was pumped over the end of the boat and mixed by action of the boat's wake and motor.

On October 16 and November 3, eight bags of Fish-Tox were added to the reservoir and on October 27 four bags were added to Arrow Creek and the canal above the reservoir. The toxicant was put into solution by dragging the bags through the water.

Findings:

An extremely slow kill was observed following the application of Pro-Noxfish, probably due to the low water temperature (48°F). Trout began appearing three to four hours following application and small suckers and minnows shortly thereafter. Large suckers failed to show following the application of Pro-Noxfish.

On October 16, five bags of fish-Tox were added in an attempt to eradicate the larger suckers which had not previously shown up to any extent.

On October 27 Fish-Tox was added to the canal and Arrow Creek above the reservoir. Gill nets were set in the reservoir at that time and removed November 2. Three suckers were caught in the nets and presumed to have entered from the canal. Additional Fish-Tox (3 bags) was then added to the reservoir and canal on November 3.

One gill net was set December 11 and lifted December 17. No fish were caught during this period.

Suckers (<u>Catostomus sp.</u>) were the predominant species killed. Rainbow trout were the only game fish killed, sixteen in number. Several species of small forage fish were observed.

Fingerling rainbow trout will be planted in the reservoir during the spring of 1960 in an effort to establish a fishable population of trout.

Recommendations:

None

Data and Reports:

The original data and reports are in the fisheries office of the Fish and Game Department District Headquarters in Great Falls.

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Date <u>December 21, 1959</u>

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